

CURRICULUM VITAE - Eng. (Prof.) Jagath Manatunge

1. Name: Eng. (Prof.) Jagath Manatunge

Profile: An academic/researcher with proven didactic and research skills. Multi-disciplinary background with an impressive research/publication record. Possesses the ability to conduct independent research and analysis, identifying issues, formulating options and making conclusions. Extensive exposure to national and international multi-disciplinary professional environments.

2. Current Affiliation: Professor in Environmental Engineering, University of Moratuwa
Address: Department of Civil Engineering, University of Moratuwa, Moratuwa
Telephone No.: 011-2560567 **Facsimile No.:** 011-2651326
E-Mail Address: manatunge@uom.lk

3. Residential Address: 59/14, Galpotta Road, Nawala, Rajagiriya, Sri Lanka
Telephone No.: 011-288 2902 **Mobile Phone:** 071-8045546

4. Date of Birth: 20th August 1966 **Citizenship:** Sri Lankan

5. Education:

School, College and/or University	Degree Obtained	Date Obtained
Saitama University, Japan	Ph.D. (Biological & Environ Sci.)	March 25, 1999
Imperial College of Science, Technology & Medicine, University of London, UK	M.Sc. (Environmental Tech.)	November 1, 1995
	D.I.C. (Environmental Tech.)	December 31, 1995
Dept of Civil Engineering, University of Moratuwa, Moratuwa, Sri Lanka	B.Sc. (Civil Engineering) First Class Honors Cum. GPA: 4.0/4.0	December 22, 1993
The Chartered Institute of Management Accountants (CIMA)	Passed Finalist	May 1991

7. Membership of Professional Associations:

- Chartered Engineer, Institution of Engineers, Sri Lanka, (2007 -) **M5073**
- Member, Institute of Environmental Professionals in Sri Lanka, (2013 -) **M330**
- Member, Asia Oceania Geosciences Society (2002 -)
- Associate Member - The Japan Society of Limnology (1996-)
- Associate Member - Japan Society for the Water Environment (1997-)
- Member, Asia Pacific Association of Hydrology and Water Resources (2004 -)

8. Other Training:

- Two-week training programme on Freshwater Lake Restoration, The National Environmental Research Institute (NERI) in Silkeborg, Denmark, July 2003.
- Training programme on the Use of Advanced Instrumentation in Water Quality Analysis, organized by the Aghakar Research Institute, Pune, India, July 2007.
- Training programme on Cleaner Production, NCPC, Sri Lanka, June 2006.
- Training on Gene Technology and Gene Engineering Applications in Environmental Engineering, Genetech Sri Lanka, Colombo, November 2007.
- Certificate course in Learning / Teaching in Higher Education, OUSL, July 2008
- Development of Ecocities, Asian Productivity Organization, Taiwan, June 2015

9. Countries of Work Experience:

Sri Lanka, Japan, Turkey, Indonesia, Australia

10. Languages:

	Speaking	Reading	Writing
English	Excellent	Excellent	Excellent
Sinhala	Mother Tongue/Native Language		

11. Employment Record:

Current Position

From February 2006 To Date	
Employer	Department of Civil Eng., University of Moratuwa, Sri Lanka
Positions Held	Professor (from Nov. 2016) Senior Lecturer (Feb 2006 - Oct 2016)
Other engagements	Head - Department of Languages & English Language Training Centre (From October 2008 - May 2017) Coordinator, MSc/Postgraduate Diploma in Environmental Engineering and Management Coordinator, MSc/Postgraduate Diploma in Environmental Management Student Counselor, Faculty of Engineering Committee Member, Senate Research Committee Chairman, Intellectual Property Advisory Committee - IPAC

Details of duties and responsibilities:

- Curricular and co-curricular activities: conducting lectures, examinations, tutorial, field & laboratory classes for undergraduate and postgraduate students; Design and preparation of course material.
- Research supervision and guidance: Undergraduate and postgraduate students
- Dissemination of academic & research findings and output; organizing symposiums, workshops, seminars and term presentations; Supervision of technical/research staff
- Administration duties and projects assigned by the department; participation in various committees and administrative assignments; participating in faculty development programmes

Subjects Taught (jointly with other academics)

Undergraduate Level	Postgraduate Programmes
CE3152 Fundamentals of Environmental Eng. CE4052 Environmental Engineering CE4522 Sustainable Design and Construction CE4552 Water & Wastewater Treatment CE4562 Environmental Impact Assessment DE3292 History and Development of Eng. AL3050 Landscape Engineering	CE5504 Environmental Pollution control CE5524 Research Methods and Data analysis CE5528 Environmental Management CE5590 Project in Water and Wastewater CE5533 Water Treatment Principles & Design CE5541 Water and Wastewater Eng. & Design CE5550 Meteorology and Limnology CE5553 Forestry and Wetland Management CE5810 Water Supply and Sanitation CE5843 Water and Wastewater Treatment

Previous Positions

1	From May 1999 to December 2005	
	Employer	Saitama University, Japan
	Positions Held	Assistant Professor (April 2001 - Dec. 2005) JSPS Research Fellow (May 1999 - March 2001)
2	From Dec. 1993 to March 1999	
	Employer	University of Moratuwa
	Positions Held	Lecturer

12. Current Key Positions Outside Main Employment

- Council Member, Institution of Engineers Sri Lanka (Since Oct 2017)
- Member, Board of Management, Postgraduate Institute of English, Open University of Sri Lanka (Since October 2010)
- Member, Board of Directors, Uni-Consultancy Services (Since May 2013)
- Member - Steering Committee for the establishment of the Engineering Faculty for University of Colombo

12. Awards & Scholarships for Academic Achievements

JSPS Research Fellowship for Foreign Researchers 1999/2000 - awarded by The Japan Society for the Promotion of Science

Monbukagakushosho Scholarship 1996 - Awarded by the Japanese Government

Chevening Scholarship 1994/1995 - Awarded by the British Commonwealth Office

Prof. C. Patuwathawithana Memorial Award 1993 - Awarded for the Best Engineering Graduate - University of Moratuwa, Sri Lanka.

Dr. A.N.S. Kulasinghe Award 1993 - Awarded for the Best Civil Engineering Graduate - University of Moratuwa, Sri Lanka

Rex Croos Moraes Memorial Award 1993 - Awarded for the Best Student in Construction, University of Moratuwa, Sri Lanka

Award for the Best Student in Building and Structural Engineering 1989/1990, University of Moratuwa, Sri Lanka

13. Awards for Research

Best Presentation Award for the paper presented at Annual Symposium of the KDU, 2017

Best Paper presented at International Conference on Advanced Civil and Environmental Engineering Practices for Sustainable Development, 2017

Prof. E. O. E. Pereira Award for the Best Paper read at the Annual Conference of the Institution of Engineers, Sri Lanka in 2015.

Presidential Award for Scientific Publications, 2009

Award of Excellence in Recognition of the Outstanding Research Performances for three years ending 2016, 2014, 2013, 2012, 2011, 2009, 2008

Award of Excellence in Recognition of the Outstanding Research Performances for three years ending 2013

Special Recognition Award for Receiving President's Award for Scientific Publications in 2013, University of Moratuwa, 2014.

Award for the Best Presentation - The First International Summer Symposium, Japan Society of Civil Engineers (1999 August)

14. Contribution for Promotion of Research

(a) Editorial Board Member

- Journal of the National Science Foundation of Sri Lanka (NSF) since August 2016.
- Publications of Institution of Engineers Sri Lanka
- Eco-development Journal

(b) Editor

- Transactions - Institution of Engineers

(c) Reviewer (Last 5 years)

International Indexed Journals	Local journals
Water Science & Technology	Engineer Journal of the Institute of Engineers
Journal of Environmental Protection	Journal of the National Science Foundation
Journal of Environmental Engineering	Ruhuna Journal of Science
Landscape Ecology and Management	Journal of Science, University of Kelaniya
Wetlands Ecology & Management	Rohana - Research Journal of the University of Ruhuna
Hydrobiologia	

(d) Reviewer - Annual conferences and symposiums (Last 5 years)

MERCon - University of Moratuwa Engineering Research Conference

Advanced Civil and Environmental Engineering Practices for Sustainable Development, University of Ruhuna

International Conference on Sustainable Built Environment (ICSBE), organized by the University of Peradeniya, University of Moratuwa, and University of Ruhuna

Annual sessions of the Institute of Engineers (IESL), Sri Lanka

Annual sessions of Sri Lanka Association for the Advancement of Science (SLAAS)

Annual International Research Conference of Kotalawala Defiance University

International Forestry and Environment Symposium organized by the University of Sri Jayawardenapura

(e) Overall Performance in Conducting Research

Summary of Google Scholar® Citations (as of July 23, 2019):

- Total Citations: 1,435
- h-Index: 20
- i-10 Index: 38

- 56 International Journal Papers (Refereed and Indexed Papers only)
Out of which 47 in SCI and/or SCIE-indexed Journals
- 8 Book Chapters - Published by Imperial College Press, Routledge, UNESCO Press, ILO, Taylor & Francis, Shaker-Verlag
- 6 Research Monographs
- More than 200 Conference Papers and Abstracts

15. Main Research Areas

(1) *Water Pollution Control; Lake and River Restoration*

- 18 International Journal Papers
- 4 Book Chapters and 6 Research Monographs
- Removal of heavy metals from water using membranes, filtration, and adsorption
- Removal of nutrients and heavy metals from wastewater using constructed wetlands
- Dealing with Algal Toxins and Dissolved Organics in Drinking Water
- Behaviour of sludge blankets in removing turbidity
- Removal of FOG in wastewater by bioaugmentation
- Restoration of Estuarine /Lagoonal/ Riverine systems: Koggala, Malala-Embillikala, Rekawa, Chilaw, Ratgama, Madampe, Garanduwa, Lunawa, Negombo Lagoon in Sri Lanka; Blackwater Estuary, Essex, UK; Myall Lakes, NSW, Australia; Wodonga Wetlands, Albury, VIC, Australia; Lake George, ACT, Australia
- Modelling macrophyte-nutrient-phytoplankton-zooplankton interactions in shallow eutrophic lakes; Control of algal blooms in lakes/ponds; nutrient dynamics; Applications of biomanipulation in restoration of water bodies

(2) *Ecological Engineering; Ecological Modelling*

- 28 International Journal Papers
- Describing Optimal Foraging Behaviour, planktivory, biomanipulation using mathematical models, validated by lab-scale experiments
- Effects of flowing water, water depth, sediment characteristics, nutrient availability on the growth dynamics of submerged and emergent macrophytes (Typha, Phragmites, Juncus, Cyperus), morphological adaptations
- Seasonal dynamics of resource allocation, translocation, harvesting of emergent macrophytes; growth dynamics of macrophytes
- Phytoplankton (*Microcystis aeruginosa*, *Scenedesmus quadricauda*, and *Melosira ambigua*) and zooplankton (*Daphnia pulex*) growth dynamics

(3) *Social and Environmental Issues*

- 10 International Journal Papers
- 4 Book Chapters
- Technology transfer, knowledge sharing and other decision factors influencing adoption of appropriate technology: Aquaculture: Saguling Dam, West Java; Irrigation: Ataturk Dam, Turkey
- Sustainable development of natural resources: planning and policy development (Kotmale, Victoria, Ataturk Dam (Turkey), Saguling Dam and Bili Bili Dam (Indonesia), Ikawa Dam (Japan))
- Long-term consequences of involuntary resettlement (Kotmale, Victoria, Wanarajo Dam, Koto Panjang Dam)
- Water policy analysis and watershed management (Mekong River Basin)
- Policy analysis, management issues & environmental impacts due to development of inland navigation in major transboundary rivers (Mekong River)
- Post-disaster resettlement; Tsunami housing in Sri Lanka; Resettlement at Fukushima, Japan

16. Projects related to the Preparation of Strategic Plans, Master Plans, and Development Plans:

- Member of Master Plan Committee, University of Moratuwa, Moratuwa, 2012-2014
- Member of Master Plan Committee, Eastern University of Sri Lanka, Chenkalady Main Campus & Trincomalee Campus, 2015
- Member of Master Plan Committee, Vipulananda Institute, Eastern University, 2015
- Member of Master Plan Committee, South Eastern University of Sri Lanka, 2013
- Member of Master Plan Committee, Institute of Indigenous Medicine, Rajagiriya 2017
- Member of Master Plan Committee of University of Colombo Institute for Agrotechnology and Rural Sciences (UCIARS), Weligatta 2015
- Curriculum Development Committees:
 - Faculty of Engineering, University of Colombo (to be established)
 - Department of Civil Engineering, University of Sri Jayawardenapura
 - Department of Civil Engineering, General Sir John Kotalawela University
 - Department of Civil Engineering, University of Moratuwa
 - Department of Civil Engineering, Southeastern University of Sri Lanka
- Member, Negombo Lagoon Development Master Plan, Ministry of Fisheries, 2016
- Environmental Specialist for the Preparation of the Strategic Development Plans for (a) Kandy Metropolitan area and, (b) Galle Metropolitan Area under Strategic Cities Development Programme, The World Bank, 2014
- Environmental Specialist and Pollution Control Expert - Strategic Environmental Assessment for the proposed Hambantota Development Plan, 2009
- Environmental Expert for Preparation of Hamilton Canal Development Plan, 2013
- Environmental Specialist and Pollution Control Expert - Strategic Environmental Assessment (SEA) for the proposed Trincomalee District Development Plan, 2007

17. Significant contribution and participation in National Committees

- Member of the Technical Evaluation Committee on the national level proposals called for Municipal Solid Waste Management facilities, Western Province, appointed by the Ministry of Megapolis & Western Development in 2016/17
- Member of the evaluation of the Study on actual environmental impact of thermal power generation of Sri Lanka, Public Utilities Commission of Sri Lanka, 2017/2018
- Member of the Technical Advisory Committee on technical aspects of the planning & designing of the sanitary landfills to be established in Sri Lanka, appointed by Director General, the Central Environmental Authority in 2015
- Member of Technical Committee on the evaluation of sewerage distribution systems and wastewater treatment plant of Diyathalawa and Mahiyangana Base Hospitals, Appointed by Provincial Director/ Provincial Department of Buildings in 2013
- Chairman of the Technical Evaluation Committee on Environmental Impact Assessment (EIA) of the proposed wastewater treatment at Buddhist and Pali University of Sri Lanka, appointed by Buddhist and Pali University, 2010
- Committee member for Facilitation of Reconstruction and Restoration of the Wetland surrounding Water's Edge, Urban Development Authority, appointed after Supreme Court Judgement on "Waters Edge" Golf Course, 2009

- Technical committee member for the Mission 7 - Upgrading, Implementing and Coordinating the National Action Plan for Haritha Lanka Programme in 2014
- Coordination Committee member for the Implementation of the National Action Plan for Haritha Lanka Programme in 2009 organized by the Ministry of Environment
- Sub Committee member for the in Developing Specifications for Sanitary Landfills in Sri Lanka in 2011 for the Institute of Construction Training and Development
- National Steering Committee member in MoU on Cooperation in the field of septage management between Ministry of Water Supply and drainage and IWMI
- Organizing committee member of the 11th Sri Lanka University Games - 2013 and Chairman of media committee appointed for the Sri Lanka University Games 2013
- Committee member of "Revision of the effluent discharge standards- regulation no 1534/18" organized by Central Environmental Authority in year 2010
- Technical Committee member for Solid waste management at Seethawaka Industrial Park for the Board of Investments in 2008
- Team member of the committee to address the Dam-related issues in Sulawesi, Hasanuddin University Makassar, Sulawesi, Indonesia in 2008
- Feasibility Study member on Proposed Textile manufacturing and processing zone at Horana for the Board of investment in 2006

18. Consultancy projects carried out during the recent years

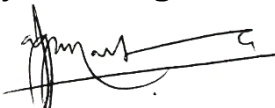
- Environmental Assessment Expert: I have contributed to more than 100 EIA/IEE studies and Strategic Environmental Assessments, Technical Feasibility studies
- Water Sanitation Expert: I have undertaken assignments for the ADB, OXFAM and local agencies
- Reviewer of technical projects/reports/studies: This include feasibility studies of infrastructure development projects, urban development projects, Master Plans, technical designs etc.
- Water Pollution Control Specialist for projects of the ADB, the World Bank, MCUDP, NSWDB, UDA, etc.
- Water Quality Expert: I have contributed to many studies as a water quality expert
- Resource Person/Expert: I have contributed to many workshops, symposia, training programmes as a coordinator, resource persons, etc.
- Environmental Engineer: I have completed many technical projects that include wastewater treatment and disposal, water treatment and supply

19. References

Professor KKCK Perera
Vice-Chancellor
University of Moratuwa, Moratuwa

Professor Hiroki Yamaguchi
President
Saitama University, Japan

20. I hereby declare that the details furnished above are true and correct to the best of my knowledge



Signature (Jagath Manatunge)

Date: 23.07.2019